DETAILED ACTION

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 08/19/2011 has been entered.

Response to Arguments

2. Applicant's arguments filed on 08/19/2011 with respect to claims 1 - 2, 10, 12, and 16 - 22 have been considered but are not persuasive.

3. Regarding **claims 1 - 2, 10, 12, and 16 - 22**, applicant argues that Iisaka et al. fails to teach a physical line pattern. Applicant argues that Iisaka et al. does not disclose "said guide determining unit determines that the physical object is not required to be guided if the number of the lines included in the line pattern possessed by the physical object or the total length of the lines included in the line pattern possessed by the physical object..."

In response the examiner notes that the applicant does not specifically claim in the claims e.g. that the line pattern is a part of the physical object and is a physical line pattern which is detected from a shot image obtained by the shooting unit as discussed

in paragraph 0073 of applicants pending application. The applicant only claims that there is a physical object and that the physical object possesses the line pattern. The method in which the claim is written the examiner can read it as a physical object and any line pattern whether it is physical or generated included in the display. Iisaka et al. teaches in figures 3 – 4, 5A, 5B, and 6; path and required movement dealing with and depending on number of line patterns making up movement units; also column 3 line 60 – column 4 line 12 and column 5 lines 55 - 65; when movement reaches a predetermined maximum value of the lines the guidance stops; the examiner can read a pattern possessed by the physical object as a physical object and any line pattern whether it is physical or generated when both are displayed.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claims 1, 2, 10, 16 - 18, and 20 - 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Sukegawa et al. (US PgPub No. 2003/0039380) in view of Iisaka et al. (US patent NO. 6,366,221).

Regarding **claim 1,** Sukegawa et al. teaches a shooting device (figures 20, 51, 53, and 54 item 101), comprising:

a shooting unit which shoots a physical object as a shooting target (figures 20, 51, 53, and 54 item 101, also figures 24 - 26 and 28 - 50), a position of the physical object being movable (paragraphs 0235 – 0253; person's face moves);

an expected shooting state storing unit which stores expected shooting state information which represents an expected position of the physical object (paragraph 0250; information indicating face conditions required also figures 24 - 26 and 28 - 50);

a guide determining unit which determines how the physical object is to be guided to the expected position based on the expected shooting state information and an image shot by said shooting unit (figures 24 - 26 and 28 – 50 also paragraphs 0243 - 0063), said guide determining unit determines whether the physical object should be moved close to said shooting unit or away from said shooting unit by comparing a size of the physical object in the image shot by said shooting unit and a size of the physical object represented by the expected shooting state information (figures 24 – 26 and 28 – 50 also paragraphs 0243 - 0063);

a guide instruction outputting unit which instructs how the physical object is to be guided to the expected position based on a result of the determination made by said guide determining unit (figures 24 - 26 and 28 – 50; also paragraphs 0243 - 0063), said guide instruction outputting unit outputs a guidance instruction for moving the physical object close to said shooting unit or moving the physical object away from said shooting unit, based on determination by said guide determining unit (paragraphs 0243 – 0063; "Please move your face a little away from the camera" or "Please move your face a little

closer to the camera", or figures 41 – 50 or by displaying similar contents on the screen); and

an image outputting unit which outputs the image shot by said shooting unit (figures 24 - 26 and 28 – 50 also paragraphs 0243 - 0063).

However, Sukegawa et al. fails to disclose wherein: the physical object possesses a line pattern including lines; a number of lines or a total length of lines to be shot by said shooting unit is defined as the expected shooting state information; and said guide determining unit determines that the physical object is not required to be guided, if the number of the lines included in the line pattern possessed by the physical object or the total length of the lines included in the line pattern possessed by the physical object, which is detected from an image of the physical object shot by said shooting unit, is larger than the number of lines or the total length of lines, which is defined as the expected shooting state information.

Iisaka et al., on the other hand teaches wherein: the physical object possesses a line pattern including lines; a number of lines or a total length of lines to be shot by said shooting unit is defined as the expected shooting state information; and said guide determining unit determines that the physical object is not required to be guided, if the number of the lines included in the line pattern possessed by the physical object or the total length of the lines included in the line pattern possessed by the physical object, which is detected from an image of the physical object shot by said shooting unit, is larger than the number of lines or the total length of lines, which is defined as the expected shooting state information.

More specifically, Iisaka et al. teaches wherein: the physical object possesses a line pattern including lines (figures 5A, 5B, and 6 plurality of line patterns make up movement units); a number of lines or a total length of lines to be shot by said shooting unit is defined as the expected shooting state information (figures 3 – 4, 5A, 5B, and 6; path and required movement dealing with and depending on number of line patterns making up movement units); and said guide determining unit determines that the physical object is not required to be guided, if the number of the lines included in the line pattern possessed by the physical object or the total length of the lines included in the line pattern possessed by the physical object, which is detected from an image of the physical object shot by said shooting unit, is larger than the number of lines or the total length of lines, which is defined as the expected shooting state information (figures 3 – 4, 5A, 5B, and 6; path and required movement dealing with and depending on number of line patterns making up movement units; also column 3 line 60 – column 4 line 12 and column 5 lines 55 - 65; when movement reaches a predetermined maximum value of the lines the guidance stops).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Iisaka et al. with the teachings of Sukegawa et al. because in column 1 line 66 to column 2 line 6 Iisaka et al. teaches the invention provides the user an indicative and helpful enough system for t guiding the user without hitting anything hence improving the guidance aspect of the system and improving safety while guidance; Also, the system of Iisaka et al. provides an angle and distance aspect to the guidance to give the user a better idea of where to

be guided, hence improving the usability and guidance of the system in Sukegawa et al. when incorporated in Sukegawa et al.

Regarding **claim 2**, as mentioned above in the discussion of claim 1, Sukegawa et al. in view of Iisaka et al. teaches all of the limitations of the parent claim. Additionally, Sukegawa et al. teaches wherein: said guide determining unit determines a direction where the physical object is to be guided (figures 24 - 26 and 28 – 50; also paragraphs 0243 - 0063).

Regarding **claim 10**, as mentioned above in the discussion of claim 1, Sukegawa et al. in view of Iisaka et al. teaches all of the limitations of the parent claim. Additionally, Sukegawa et al. teaches wherein said image outputting unit outputs the image shot by said shooting unit if said guide determining unit determines that the physical object is not required to be guided (figures 24 and 41).

Regarding **claim 16**, as mentioned above in the discussion of claim 1, Sukegawa et al. in view of Iisaka et al. teaches all of the limitations of the parent claim. Additionally, Sukegawa et al. teaches wherein said guide instruction outputting unit comprises a display unit, and displays a character string corresponding to the result of the determination made by said guide determining unit, on said display unit (paragraph 0253; a guidance "Move closer to the camera" is displayed on the display 104; and paragraph 0262).

Regarding **claim 17**, as mentioned above in the discussion of claim 1, Sukegawa et al. in view of Iisaka et al. teaches all of the limitations of the parent claim. Additionally, Sukegawa et al. teaches wherein said guide instruction outputting unit comprises a display unit, and displays a graphic or a symbol corresponding to the result of the determination made by said guide determining unit, on said display unit (figures 42 – 50; and paragraph 0262).

Regarding **claim 18**, as mentioned above in the discussion of claim 1, Sukegawa et al. in view of Iisaka et al. teaches all of the limitations of the parent claim. Additionally, Sukegawa et al. teaches wherein said guide instruction outputting unit outputs voice guidance corresponding to the result of the determination made by said guide determining unit (paragraphs 0243, 0255, and 0262; voice guidance).

Regarding **claim 20,** Sukegawa et al. teaches a method of guiding a physical object to be shot with a shooting device (figures 20, 51, 53, and 54 item 101), comprising:

shooting the physical object as a shooting target with the shooting device (figures 20, 51, 53, and 54 item 101, also figures 24 - 26 and 28 - 50), a position of the physical object being movable (paragraphs 0235 – 0253; person's face moves; figures 20, 51, 53, and 54 item 101);

determining how the physical object is to be guided based on expected shooting state information (figures 24 - 26 and 28 – 50 also paragraphs 0243 - 0063), which represents an expected position of the physical object, and an image shot by the shooting device (paragraph 0250; information indicating face conditions required also figures 24 - 26 and 28 - 50), said determining including determining whether the physical object should be moved close to the shooting device or away from the shooting device by comparing a size of the physical object in the image shot by the shooting device and a size of the physical object represented by the expected shooting state information (figures 24 – 26 and 28 – 50 also paragraphs 0243 - 0063); and

outputting a guide instruction of how the physical object is to be guided to the expected position based on a result of the determining (figures 24 - 26 and 28 – 50; also paragraphs 0243 - 0063), said outputting including outputting a guidance instruction for moving the physical object close to the shooting device or moving the physical object away from the shooting device, based on a result of said comparing (paragraphs 0243 – 0063; "Please move your face a little away from the camera" or "Please move your face a little closer to the camera", or figures 41 – 50 or by displaying similar contents on the screen).

However, Sukegawa et al. fails to disclose physical object possessing a line pattern including lines with the shooting device; wherein the expected shooting state information is defined as a number of lines or a total length of lines to be shot by said shooting device, and said determining further comprises determining that the physical object is not required to be guided if the number of the lines included in the line pattern

possessed by the physical object or the total length of the lines included in the line pattern possessed by the physical object, which is detected from an image of the physical object shot by said shooting device, is larger than the number of lines or the total length of lines, which is defined as the expected shooting state information.

Iisaka et al., on the other hand teaches physical object possessing a line pattern including lines with the shooting device; wherein the expected shooting state information is defined as a number of lines or a total length of lines to be shot by said shooting device, and said determining further comprises determining that the physical object is not required to be guided if the number of the lines included in the line pattern possessed by the physical object or the total length of the lines included in the line pattern possessed by the physical object, which is detected from an image of the physical object shot by said shooting device, is larger than the number of lines or the total length of lines, which is defined as the expected shooting state information.

More specifically, Iisaka et al. teaches physical object possessing a line pattern including lines with the shooting device (figures 5A, 5B, and 6 plurality of line patterns make up movement units); wherein the expected shooting state information is defined as a number of lines or a total length of lines to be shot by said shooting device (figures 3 – 4, 5A, 5B, and 6; path and required movement dealing with and depending on number of line patterns making up movement units), and said determining further comprises determining that the physical object is not required to be guided if the number of the lines included in the line pattern possessed by the physical object or the total length of the lines included in the line pattern possessed by the physical object,

which is detected from an image of the physical object shot by said shooting device, is larger than the number of lines or the total length of lines, which is defined as the expected shooting state information (figures 3 – 4, 5A, 5B, and 6; path and required movement dealing with and depending on number of line patterns making up movement units; also column 3 line 60 – column 4 line 12 and column 5 lines 55 - 65; when movement reaches a predetermined maximum value of the lines the guidance stops).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Iisaka et al. with the teachings of Sukegawa et al. because in column 1 line 66 to column 2 line 6 Iisaka et al. teaches the invention provides the user an indicative and helpful enough system for t guiding the user without hitting anything hence improving the guidance aspect of the system and improving safety while guidance; Also, the system of Iisaka et al. provides an angle and distance aspect to the guidance to give the user a better idea of where to be guided, hence improving the usability and guidance of the system in Sukegawa et al. when incorporated in Sukegawa et al.

Regarding **claim 21,** Sukegawa et al. teaches a method of shooting a physical object with a shooting device (figures 20, 51, 53, and 54 item 101), comprising:

a first step of shooting the physical object as a shooting target with the shooting device (figures 20, 51, 53, and 54 item 101, also figures 24 - 26 and 28 - 50), a position of the physical object being movable (paragraphs 0235 – 0253; person's face moves; figures 20, 51, 53, and 54 item 101);

a second step of determining how the physical object is to be guided based on expected shooting state information (figures 24 - 26 and 28 – 50 also paragraphs 0243 - 0063) which represents an expected position of the physical object, and an image shot by the shooting device (paragraph 0250; information indicating face conditions required also figures 24 - 26 and 28 - 50), said second step of determining including determining whether the physical object should be moved close to the shooting device or away from the shooting device by comparing a size of the physical object in the image shot by the shooting device and a size of the physical object represented by the expected shooting state information (figures 24 – 26 and 28 – 50 also paragraphs 0243 - 0063);

a third step of outputting a guide instruction of how the physical object is to be guided to the expected position based on a result of the determination (figures 24 - 26 and 28 – 50; also paragraphs 0243 - 0063), said third step of outputting a guide instruction including outputting a guidance instruction for moving the physical object close to the shooting unit or moving the physical object away from the shooting unit, based on a result of said comparing (paragraphs 0243 – 0063; "Please move your face a little away from the camera" or "Please move your face a little closer to the camera", or figures 41 – 50 or by displaying similar contents on the screen); and

a fourth step of repeating the first through the third steps until it is determined that the physical object is not required to be guided (figures 24 – 26 and 28 – 50 also paragraphs 0243 - 0063).

However, Sukegawa et al. fails to disclose the physical object possessing a line pattern including lines with the shooting device; wherein the expected shooting state

information is defined as a number of lines or a total length of lines to be shot by said shooting device, and said determining further comprises determining that the physical object is not required to be guided if the number of the lines included in the line pattern possessed by the physical object or the total length of the lines included in the line pattern possessed by the physical object, which is detected from an image of the physical object shot by said shooting device, is larger than the number of lines or the total length of lines, which is defined as the expected shooting state information.

Iisaka et al., on the other hand teaches possessing a line pattern including lines with the shooting device; wherein the expected shooting state information is defined as a number of lines or a total length of lines to be shot by said shooting device, and said determining further comprises determining that the physical object is not required to be guided if the number of the lines included in the line pattern possessed by the physical object or the total length of the lines included in the line pattern possessed by the physical object, which is detected from an image of the physical object shot by said shooting device, is larger than the number of lines or the total length of lines, which is defined as the expected shooting state information.

More specifically, Iisaka et al. teaches possessing a line pattern including lines with the shooting device (figures 5A, 5B, and 6 plurality of line patterns make up movement units); wherein the expected shooting state information is defined as a number of lines or a total length of lines to be shot by said shooting device (figures 3 – 4, 5A, 5B, and 6; path and required movement dealing with and depending on number of line patterns making up movement units), and said determining further comprises

determining that the physical object is not required to be guided if the number of the lines included in the line pattern possessed by the physical object or the total length of the lines included in the line pattern possessed by the physical object, which is detected from an image of the physical object shot by said shooting device, is larger than the number of lines or the total length of lines, which is defined as the expected shooting state information (figures 3 – 4, 5A, 5B, and 6; path and required movement dealing with and depending on number of line patterns making up movement units; also column 3 line 60 – column 4 line 12 and column 5 lines 55 - 65; when movement reaches a predetermined maximum value of the lines the guidance stops).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Iisaka et al. with the teachings of Sukegawa et al. because in column 1 line 66 to column 2 line 6 Iisaka et al. teaches the invention provides the user an indicative and helpful enough system for t guiding the user without hitting anything hence improving the guidance aspect of the system and improving safety while guidance; Also, the system of Iisaka et al. provides an angle and distance aspect to the guidance to give the user a better idea of where to be guided, hence improving the usability and guidance of the system in Sukegawa et al. when incorporated in Sukegawa et al.

Regarding **claim 22,** Sukegawa et al. teaches a shooting device (figures 20, 51, 53, and 54 item 101), comprising:

shooting means for shooting a physical object as a shooting target (figures 20, 51, 53, and 54 item 101, also figures 24 - 26 and 28 - 50), a position of the physical object being movable (paragraphs 0235 – 0253; person's face moves);

storing means for storing expected shooting state information (figures 24 - 26 and 28 – 50 also paragraphs 0243 - 0063) which represents an expected position of the physical object (paragraph 0250; information indicating face conditions required also figures 24 - 26 and 28 - 50);

guide determining means for determining how the physical object is to be guided to the expected position based on the expected shooting state information and an image shot by said shooting means, said guide determining means determines whether the physical object should be moved close to said shooting means or away from said shooting means by comparing a size of the physical object in the image shot by said shooting means and a size of the physical object represented by the expected shooting state information (figures 24 – 26 and 28 – 50 also paragraphs 0243 - 0063);

guide instruction outputting means for instructing how the physical object is to be guided to the expected position based on a result of the determination made by said guide determining means (figures 24 - 26 and 28 – 50; also paragraphs 0243 - 0063), said guide instruction outputting means outputs a guidance instruction for moving the physical object close to said shooting means or moving the physical object away from said shooting means based on the determination by said guide determining means (paragraphs 0243 – 0063; "Please move your face a little away from the camera" or "Please move your face a little closer to the camera", or figures 41 – 50 or by displaying

similar contents on the screen); and image outputting means for outputting the image shot by said shooting means (figures 24 - 26 and 28 – 50 also paragraphs 0243 - 0063).

However, Sukegawa et al. fails to disclose wherein: the physical object possesses a line pattern including lines; a number of lines or a total length of lines to be shot by said shooting means is defined as the expected shooting state information; and said guide determining means determines that the physical object is not required to be guided, if the number of the lines included in the line pattern possessed by the physical object or the total length of the lines included in the line pattern possessed by the physical object, which is detected from the image of the physical object shot by said shooting means, is larger than the number of lines or the total length of lines, which is defined as the expected shooting state information.

Iisaka et al., on the other hand teaches wherein: the physical object possesses a line pattern including lines; a number of lines or a total length of lines to be shot by said shooting means is defined as the expected shooting state information; and said guide determining means determines that the physical object is not required to be guided, if the number of the lines included in the line pattern possessed by the physical object or the total length of the lines included in the line pattern possessed by the physical object, which is detected from the image of the physical object shot by said shooting means, is larger than the number of lines or the total length of lines, which is defined as the expected shooting state information.

More specifically, Iisaka et al. teaches wherein: the physical object possesses a line pattern including lines (figures 5A, 5B, and 6 plurality of line patterns make up

movement units); a number of lines or a total length of lines to be shot by said shooting means is defined as the expected shooting state information (figures 3 – 4, 5A, 5B, and 6; path and required movement dealing with and depending on number of line patterns making up movement units); and said guide determining means determines that the physical object is not required to be guided, if the number of the lines included in the line pattern possessed by the physical object or the total length of the lines included in the line pattern possessed by the physical object, which is detected from the image of the physical object shot by said shooting means, is larger than the number of lines or the total length of lines, which is defined as the expected shooting state information (figures 3 – 4, 5A, 5B, and 6; path and required movement dealing with and depending on number of line patterns making up movement units; also column 3 line 60 – column 4 line 12 and column 5 lines 55 - 65; when movement reaches a predetermined maximum value of the lines the guidance stops).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Iisaka et al. with the teachings of Sukegawa et al. because in column 1 line 66 to column 2 line 6 Iisaka et al. teaches the invention provides the user an indicative and helpful enough system for t guiding the user without hitting anything hence improving the guidance aspect of the system and improving safety while guidance; Also, the system of Iisaka et al. provides an angle and distance aspect to the guidance to give the user a better idea of where to be guided, hence improving the usability and guidance of the system in Sukegawa et al. when incorporated in Sukegawa et al.

5. Claim 12 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sukegawa et al. (US PgPub No. 2003/0039380) in view of Iisaka et al. (US patent NO. 6,366,221) in further view of Hoshuyama et al. (US patent NO. 6,906,744).

Regarding **claim 12**, as mentioned above in the discussion of claim 1, Sukegawa et al. in view of Hoshuyama et al. teach all of the limitations of the parent claim. Additionally, Sukegawa et al. teaches wherein said guide determining unit determines a direction where the physical object is to be guided based on a result of detection made by said detecting unit (figures 24 - 26 and 28 – 50 also paragraphs 0243 - 0063).

However, Sukegawa et al. in view of Hoshuyama et al. fail to disclose a detecting unit which detects a proportion of area of the image in a particular color to a whole area of the image shot by said shooting unit.

Hoshuyama et al., on the other hand teaches a detecting unit which detects a

proportion of area of the image in a particular color to a whole area of the image shot by said shooting unit.

More specifically, Hoshuyama et al. teaches a detecting unit which detects a proportion of area of the image in a particular color to a whole area of the image shot by said shooting unit (column 10 line 52 – column 12 line 29 detect skin color in a specific area).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to incorporate the teachings of Hoshuyama et al. with the teachings of Sukegawa et al. in view of Hoshuyama et al. because in column 1 lines 58 – 62 Hoshuyama et al. teaches that using the invention will reduce the occurrence of fading/tinting hence improving the image quality also the using Hoshuyama et al.'s invention will give Sukegawa et al.'s and Hoshuyama et al.'s invention an improved method of checking for skin color hence improving the recognition process.

6. Claim 19 is rejected under 35 U.S.C. 103(a) as being unpatentable over Sukegawa et al. (US PgPub No. 2003/0039380) in view of Iisaka et al. (US patent NO. 6,366,221) in further view of Shimazaki et al. (US PgPub. 2002/0198634).

Regarding **claim 19**, as mentioned above in the discussion of claim 1, Sukegawa et al. in view of Hoshuyama et al. teach all of the limitations of the parent claim.

Additionally, Sukegawa et al. teaches a guide instruction-outputting unit generates sound corresponding to the result of the determination made by said guide determining unit (paragraphs 0243, 0255, and 0262; voice guidance).

However, Sukegawa et al. in view of Hoshuyama et al. fail to teach that said sound is stereophonic sound. Shimazaki et al., on the other hand teaches that said sound is stereophonic sound.

More specifically, Shimazaki et al. teaches said sound is stereophonic sound (paragraph 0029).

Therefore, one of ordinary skill in the art at the time the invention was made would have found it obvious to use the stereophonic sound of Shimazaki et al. in the system in Sukegawa et al. in view of Hoshuyama et al. invention to create a pleasant and natural impression of sound heard from various directions, as in natural hearing to easily guide the person to the correct position.

Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to USMAN KHAN whose telephone number is (571)270-1131. The examiner can normally be reached on Mon-Fri 6:45-3:15.

8. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on (571) 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

9. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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